Liang Wang

List of Publications by Year
in descending order

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96 papers	10,805 citations	44042 48 h-index	39638 94 g-index
96 all docs	96 docs citations	96 times ranked	14229 citing authors

#	Article	IF	Citations
1	Exploration of the active center structure of nitrogen-doped graphene-based catalysts for oxygen reduction reaction. Energy and Environmental Science, 2012, 5, 7936.	15.6	2,089
2	Economical Pt-Free Catalysts for Counter Electrodes of Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2012, 134, 3419-3428.	6.6	798
3	Gram-scale synthesis of single-crystalline graphene quantum dots with superior optical properties. Nature Communications, 2014, 5, 5357.	5.8	750
4	Direct Synthesis of Spatially-Controlled Pt-on-Pd Bimetallic Nanodendrites with Superior Electrocatalytic Activity. Journal of the American Chemical Society, 2011, 133, 9674-9677.	6.6	513
5	Ultrathin graphene oxide encapsulated in uniform MIL-88A(Fe) for enhanced visible light-driven photodegradation of RhB. Applied Catalysis B: Environmental, 2018, 221, 119-128.	10.8	366
6	Full-color fluorescent carbon quantum dots. Science Advances, 2020, 6, .	4.7	344
7	PPyâ€encapsulated SnS₂ Nanosheets Stabilized by Defects on a TiO₂ Support as a Durable Anode Material for Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2019, 58, 811-815.	7.2	261
8	Strategic Synthesis of Trimetallic Au@Pd@Pt Coreâ^'Shell Nanoparticles from Poly(vinylpyrrolidone)-Based Aqueous Solution toward Highly Active Electrocatalysts. Chemistry of Materials, 2011, 23, 2457-2465.	3.2	259
9	Efficient Separation of Electronâ€“Hole Pairs in Graphene Quantum Dots by TiO₂ Heterojunctions for Dye Degradation. ACS Sustainable Chemistry and Engineering, 2015, 3, 2405-2413.	3.2	244
10	Graphene quantum dots modified mesoporous graphite carbon nitride with significant enhancement of photocatalytic activity. Applied Catalysis B: Environmental, 2017, 207, 429-437.	10.8	238
11	Metallic 1T MoS₂ nanosheet arrays vertically grown on activated carbon fiber cloth for enhanced Li-ion storage performance. Journal of Materials Chemistry A, 2017, 5, 14061-14069.	5.2	232
12	Highâ€Lithiumâ€Affinity Chemically Exfoliated 2D Covalent Organic Frameworks. Advanced Materials, 2019, 31, e1901640.	11.1	217
13	Facile synthesis of fluorescent graphene quantum dots from coffee grounds for bioimaging and sensing. Chemical Engineering Journal, 2016, 300, 75-82.	6.6	208
14	NIR-responsive carbon dots for efficient photothermal cancer therapy at low power densities. Carbon, 2018, 134, 153-162.	5.4	175
15	Self-gating in semiconductor electrocatalysis. Nature Materials, 2019, 18, 1098-1104.	13.3	167
16	Engineering grain boundaries at theÂ2D limit for theÂhydrogen evolution reaction. Nature Communications, 2020, 11, 57.	5.8	153
17	Machine-Learning-Driven Synthesis of Carbon Dots with Enhanced Quantum Yields. ACS Nano, 2020, 14, 14761-14768.	7.3	143
18	Photocatalytic Applications of Two-Dimensional Ti₃C₂ MXenes: A Review. ACS Applied Nano Materials, 2020, 3, 9581-9603.	2.4	142

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19	Rapid and Efficient Synthesis of Platinum Nanodendrites with High Surface Area by Chemical Reduction with Formic Acid. Chemistry of Materials, 2010, 22, 2835-2841.	3.2	139
20	A solvent-engineered molecule fusion strategy for rational synthesis of carbon quantum dots with multicolor bandgap fluorescence. Carbon, 2018, 130, 153-163.	5.4	132
21	Electrophoretic fabrication of highly robust, efficient, and benign heterojunction photoelectrocatalysts based on graphene-quantum-dot sensitized TiO2 nanotube arrays. Journal of Materials Chemistry A, 2013, 1, 3551.	5.2	120
22	Scalable synthesis of organic-soluble carbon quantum dots: superior optical properties in solvents, solids, and LEDs. Nanoscale, 2017, 9, 13195-13202.	2.8	117
23	Hierarchical 3D Allâ€Carbon Composite Structure Modified with Nâ€Doped Graphene Quantum Dots for Highâ€Performance Flexible Supercapacitors. Small, 2018, 14, e1801498.	5.2	105
24	Nitrogen and oxygen co-doped graphene quantum dots with high capacitance performance for micro-supercapacitors. Carbon, 2018, 139, 67-75.	5.4	98
25	Rationally Designed Efficient Dual-Mode Colorimetric/Fluorescence Sensor Based on Carbon Dots for Detection of pH and Cu²⁺ Ions. ACS Sustainable Chemistry and Engineering, 2018, 6, 12668-12674.	3.2	96
26	Sustainable Synthesis of Bright Green Fluorescent Nitrogenâ€Doped Carbon Quantum Dots from Alkali Lignin. ChemSusChem, 2019, 12, 4202-4210.	3.6	92
27	On the Role of Ascorbic Acid in the Synthesis of Single-Crystal Hyperbranched Platinum Nanostructures. Crystal Growth and Design, 2010, 10, 3454-3460.	1.4	89
28	Efficient photocatalytic degradation of ibuprofen in aqueous solution using novel visible-light responsive graphene quantum dot/AgVO3 nanoribbons. Journal of Hazardous Materials, 2016, 312, 298-306.	6.5	89
29	Regulation of functional groups on graphene quantum dots directs selective CO2 to CH4 conversion. Nature Communications, 2021, 12, 5265.	5.8	89
30	A Facile â€œDoubleâ€Catalystsâ€•Approach to Directionally Fabricate Pyridinic Nï£¿Bâ€Pairâ€Doped Crystal Graphene Nanoribbons/Amorphous Carbon Hybrid Electrocatalysts for Efficient Oxygen Reduction Reaction. Advanced Materials, 2022, 34, e2107040.	11.1	88
31	Simulated solar driven catalytic degradation of psychiatric drug carbamazepine with binary BiVO4 heterostructures sensitized by graphene quantum dots. Applied Catalysis B: Environmental, 2017, 205, 587-596.	10.8	87
32	Room-temperature synthesis of graphene quantum dots via electron-beam irradiation and their application in cell imaging. Chemical Engineering Journal, 2017, 309, 374-380.	6.6	81
33	Three Minute Ultrarapid Microwave-Assisted Synthesis of Bright Fluorescent Graphene Quantum Dots for Live Cell Staining and White LEDs. ACS Applied Nano Materials, 2018, 1, 1623-1630.	2.4	81
34	Assembling nitrogen and oxygen co-doped graphene quantum dots onto hierarchical carbon networks for all-solid-state flexible supercapacitors. Electrochimica Acta, 2017, 235, 561-569.	2.6	78
35	Boosting the energy storage densities of supercapacitors by incorporating N-doped graphene quantum dots into cubic porous carbon. Nanoscale, 2018, 10, 22871-22883.	2.8	78
36	Carboxylated carbon quantum dot-induced binary metalâ€“organic framework nanosheet synthesis to boost the electrocatalytic performance. Materials Today, 2022, 54, 42-51.	8.3	76

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37	C-axis preferentially oriented and fully activated TiO₂ nanotube arrays for lithium ion batteries and supercapacitors. Journal of Materials Chemistry A, 2014, 2, 11454-11464.	5.2	75
38	Boosting ORR Electrocatalytic Performance of Metal-Free Mesoporous Biomass Carbon by Synergism of Huge Specific Surface Area and Ultrahigh Pyridinic Nitrogen Doping. ACS Sustainable Chemistry and Engineering, 2018, 6, 13807-13812.	3.2	74
39	Nearly monodisperse graphene quantum dots fabricated by amine-assisted cutting and ultrafiltration. Nanoscale, 2013, 5, 12098.	2.8	73
40	Synthesis of Mesoporous Pt Nanoparticles with Uniform Particle Size from Aqueous Surfactant Solutions toward Highly Active Electrocatalysts. Chemistry - A European Journal, 2011, 17, 8810-8815.	1.7	70
41	Industrial production of ultra-stable sulfonated graphene quantum dots for Golgi apparatus imaging. Journal of Materials Chemistry B, 2017, 5, 5355-5361.	2.9	68
42	Role of Pyridinic-N for Nitrogen-doped graphene quantum dots in oxygen reaction reduction. Journal of Colloid and Interface Science, 2017, 508, 154-158.	5.0	61
43	Amine-enriched Graphene Quantum Dots for High-pseudocapacitance Supercapacitors. Electrochimica Acta, 2016, 208, 260-266.	2.6	60
44	Graphene-Encapsulated CuP₂: A Promising Anode Material with High Reversible Capacity and Superior Rate-Performance for Sodium-Ion Batteries. Nano Letters, 2019, 19, 2575-2582.	4.5	60
45	Amineâ€Functionalized Carbon Nanodot Electrocatalysts Converting Carbon Dioxide to Methane. Advanced Materials, 2022, 34, e2105690.	11.1	59
46	Hierarchical construction of high-performance all-carbon flexible fiber supercapacitors with graphene hydrogel and nitrogen-doped graphene quantum dots. Carbon, 2019, 154, 410-419.	5.4	58
47	Synthesis of graphene quantum dot/metalâ€“organic framework nanocomposites as yellow phosphors for white light-emitting diodes. New Journal of Chemistry, 2018, 42, 5083-5089.	1.4	56
48	Carrier engineering of carbon nitride boosts visible-light photocatalytic hydrogen evolution. Carbon, 2021, 179, 80-88.	5.4	52
49	Seasonal and spatial distribution of 4-tert-octylphenol, 4-nonylphenol and bisphenol A in the Huangpu River and its tributaries, Shanghai, China. Environmental Monitoring and Assessment, 2013, 185, 3149-3161.	1.3	50
50	Enhanced photocatalytic activity of sulfur-doped graphene quantum dots decorated with TiO 2 nanocomposites. Materials Research Bulletin, 2018, 97, 428-435.	2.7	49
51	Amphiphilic Graphene Quantum Dots as Selfâ€Targeted Fluorescence Probes for Cell Nucleus Imaging. Advanced Biology, 2018, 2, 1700191.	3.0	47
52	Rational Design of Oxygen-Enriched Carbon Dots with Efficient Room-Temperature Phosphorescent Properties and High-Tech Security Protection Application. ACS Sustainable Chemistry and Engineering, 2019, 7, 19918-19924.	3.2	47
53	White luminescent single-crystalline chlorinated graphene quantum dots. Nanoscale Horizons, 2020, 5, 928-933.	4.1	47
54	Ultrastable Amine, Sulfo Cofunctionalized Graphene Quantum Dots with High Two-Photon Fluorescence for Cellular Imaging. ACS Sustainable Chemistry and Engineering, 2018, 6, 4711-4716.	3.2	45

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55	Facile Synthesis of Silver Bromide-Based Nanomaterials and Their Efficient and Rapid Selective Adsorption Mechanisms Toward Anionic Dyes. ACS Sustainable Chemistry and Engineering, 2016, 4, 4617-4625.	3.2	44
56	Phase-transformed Mo4P3 nanoparticles as efficient catalysts towards lithium polysulfide conversion for lithiumâ€“sulfur battery. Electrochimica Acta, 2020, 330, 135310.	2.6	44
57	Phosphorescence Tuning of Fluorine, Oxygen-Codoped Carbon Dots by Substrate Engineering. ACS Sustainable Chemistry and Engineering, 2021, 9, 16262-16269.	3.2	38
58	Boron Nanosheet-Supported Rh Catalysts for Hydrogen Evolution: A New Territory for the Strong Metal-Support Interaction Effect. Nano-Micro Letters, 2021, 13, 138.	14.4	37
59	One-Pot Synthesis of Orange Emissive Carbon Quantum Dots for All-Type High Color Rendering Index White Light-Emitting Diodes. ACS Sustainable Chemistry and Engineering, 2022, 10, 8289-8296.	3.2	37
60	Unravelling the Role of Strong Metalâ€“Support Interactions in Boosting the Activity toward Hydrogen Evolution Reaction on Ir Nanoparticle/N-Doped Carbon Nanosheet Catalysts. ACS Applied Materials & Interfaces, 2021, 13, 22448-22456.	4.0	34
61	Boosting Visibleâ€Light Photocatalytic Performance for CO₂ Reduction via Hydroxylated Graphene Quantum Dots Sensitized MILâ€101(Fe). Advanced Materials Interfaces, 2020, 7, 2000468.	1.9	33
62	Designing a sustainable fluorescent targeting probe for superselective nucleus imaging. Carbon, 2021, 180, 48-55.	5.4	31
63	Facile conversion of coal tar to orange fluorescent carbon quantum dots and their composite encapsulated by liposomes for bioimaging. New Journal of Chemistry, 2017, 41, 14444-14451.	1.4	30
64	Sorghum-Waste-Derived High-Surface Area KOH-Activated Porous Carbon for Highly Efficient Methylene Blue and Pb(II) Removal. ACS Omega, 2020, 5, 13548-13556.	1.6	29
65	PPyâ€encapsulated SnS₂ Nanosheets Stabilized by Defects on a TiO₂ Support as a Durable Anode Material for Lithiumâ€ion Batteries. Angewandte Chemie, 2019, 131, 821-825.	1.6	28
66	Yellow fluorescent graphene quantum dots as a phosphor for white tunable light-emitting diodes. RSC Advances, 2019, 9, 9301-9307.	1.7	27
67	Effect of thiophene S on the enhanced ORR electrocatalytic performance of sulfur-doped graphene quantum dot/reduced graphene oxide nanocomposites. RSC Advances, 2018, 8, 19635-19641.	1.7	25
68	Sustainable Synthesis of Nâ€Doped Hollow Porous Carbon Spheres via a Sprayâ€Drying Method for Lithiumâ€Sulfur Storage with Ultralong Cycle Life. Batteries and Supercaps, 2020, 3, 1201-1208.	2.4	25
69	Electron beam induced degradation of clopyralid in aqueous solutions. Journal of Radioanalytical and Nuclear Chemistry, 2011, 288, 759-764.	0.7	22
70	Graphene quantum dots assisted photovoltage and efficiency enhancement in CdSe quantum dot sensitized solar cells. Journal of Energy Chemistry, 2015, 24, 722-728.	7.1	22
71	High fluorescent sulfur regulating graphene quantum dots with tunable photoluminescence properties. Journal of Colloid and Interface Science, 2018, 529, 205-213.	5.0	22
72	Enhancing Defects of N-Doped Carbon Nanospheres Via Ultralow Co Atom Loading Engineering for a High-Efficiency Oxygen Reduction Reaction. ACS Applied Energy Materials, 2021, 4, 3439-3447.	2.5	18

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73	Binder-Free Graphene Organogels as Cost-Efficient Counter Electrodes for Dye-sensitized Solar Cells. Electrochimica Acta, 2016, 191, 946-953.	2.6	16
74	Efficient absorption of ibuprofen in aqueous solution using eco-friendly C3N4/soot composite. Journal of Materials Science, 2018, 53, 5929-5941.	1.7	16
75	Carbonated MOF-based graphene hydrogel for hierarchical allâ€'carbon supercapacitors with ultra-high areal and volumetric energy density. Journal of Electroanalytical Chemistry, 2020, 876, 114489.	1.9	15
76	Direct thermal annealing synthesis of FeO nanodots anchored on N-doped carbon nanosheet for long-term electrocatalytic oxygen reduction. Electrochimica Acta, 2021, 398, 139361.	2.6	15
77	The Synergistic Effect of Pyridinic Nitrogen and Graphitic Nitrogen of Nitrogen-Doped Graphene Quantum Dots for Enhanced TiO2 Nanocompositesâ€™ Photocatalytic Performance. Catalysts, 2018, 8, 438.	1.6	13
78	Radical-induced destruction of diethyl phthalate in aqueous solution: kinetics, spectral properties, and degradation efficiencies studies. Research on Chemical Intermediates, 2013, 39, 3727-3737.	1.3	11
79	A universal strategy to separate hydrophilic hybrid-light carbon quantum dots using pure water as eluent. Applied Materials Today, 2020, 18, 100528.	2.3	10
80	Functional group tuning of two-dimensional carbon nanosheets for boosting oxygen reduction electrocatalysis. Carbon, 2021, 185, 395-403.	5.4	10
81	Graphene quantum dots modified Ag₃PO₄ for facile synthesis and the enhanced photocatalytic performance. Journal of the Chinese Advanced Materials Society, 2018, 6, 255-269.	0.7	8
82	Revealing the effect of phosphorus doping on Co@carbon in boosting oxygen evolution catalytic activity. Journal of Alloys and Compounds, 2020, 843, 156001.	2.8	8
83	Large-scale fabrication of biomass-derived N, S co-doped porous carbon with ultrahigh surface area for oxygen reduction. Materials Chemistry and Physics, 2021, 267, 124601.	2.0	7
84	Radiolysis route to Pt nanodendrites with enhanced comprehensive electrocatalytic performances for methanol oxidation. Catalysis Communications, 2015, 62, 14-18.	1.6	6
85	A bionic strategy for addressing scale-span issues in all-carbon electrocatalytic systems. Electrochimica Acta, 2017, 245, 318-326.	2.6	6
86	N-Doped Graphene Quantum Dots Supported by Carbon Nanotubes Grown on Carbon Clothes for Lithium Storage. Journal of the Electrochemical Society, 2020, 167, 060513.	1.3	6
87	White light emitting diodes based on green graphene quantum dots and red graphene quantum dots. Molecular Crystals and Liquid Crystals, 2022, 733, 46-51.	0.4	6
88	Ultrafast spontaneous emission modulation of graphene quantum dots interacting with Ag nanoparticles in solution. Applied Physics Letters, 2016, 109, .	1.5	5
89	Iron Carbide Nanoparticles Supported by Nitrogen-Doped Carbon Nanosheets for Oxygen Reduction. ACS Applied Nano Materials, 2021, 4, 8360-8367.	2.4	5
90	Rational Design of Niâ€Based Electrocatalysts by Modulation of Iron Ions and Carbon Nanotubes for Enhanced Oxygen Evolution Reaction. Advanced Sustainable Systems, 2020, 4, 2000227.	2.7	4

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91	Distribution characteristics and ecological evaluation of chlorobenzene compounds in surface sediment of the Maowei Sea, Guangxi, China. Environmental Monitoring and Assessment, 2019, 191, 309.	1.3	2
92	Valence State Modulation of Chromium in Selective Hydrogen Peroxide Production Electrocatalysts. ACS Applied Energy Materials, 2021, 4, 10114-10123.	2.5	2
93	Photocatalytic Degradation of 4-Bromodiphenyl Ether Using TiO2/MWCNTs Composites. , 2012, , .		1
94	Recent progress in the development of carbon quantum dots for cell imaging. Oxford Open Materials Science, 2020, 1, .	0.5	1
95	High Humidity Stability Carbon-Dot-Based Light-Emitting Diode With Thin-Film Encapsulation. IEEE Transactions on Electron Devices, 2022, 69, 3236-3239.	1.6	1
96	Adsorptive removal of methylene blue by CuO-acid modified sepiolite as effective adsorbent and its regeneration with high-temperature gas stream. Water Science and Technology, 2016, 74, 844-851.	1.2	0